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# LECTURE: Integrating Patent Law and the Corporation: The Walker Digital Approach

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## **LECTURE: Integrating Patent Law and the Corporation: The Walker Digital Approach<sup>+</sup>**

**Dean Alderucci\***

### **I. INTRODUCTION**

In the first half of my talk, I will discuss the integration of the legal requirements that the patent system imposes on corporations, and I will contrast the traditional approach, or the approach that is adopted by most corporations, with the approach I deem the optimal approach, the “Walker Digital Approach.” That approach evolves continually, so it is flexible and it adapts to the way things should be when you have patent law and patent procedures in mind. The second half of my talk will focus more on Walker Digital itself, and the policies that position Walker Digital as a good patentee. I will also discuss our specific inventions, our licensing policies, and our spin-off policies.

### **II. INTEGRATION OF THE LEGAL REQUIREMENTS AND THE CORPORATION**

#### **A. The Traditional Approach**

What is the difference between the traditional approach that most corporations have and what I call the optimal approach? The traditional approach, unfortunately for the patent practitioner, treats patents almost as an afterthought. Patents are developed apart from the existing corporate structure. By corporate structure, I mean the policies and procedures of the corporation that are geared toward one thing: the production of whatever good or service that the company provides. Such a corporate structure might be optimal for production of that good or service, but it is not necessarily optimal for the production of patent protection around that good or service. The optimal strategy is to take a more progressive look at patents and, assuming that the corporate structure is not fixed, ask how you would change it so that the organization could make better use of patents.

I count myself lucky that a little over two years ago, Jay Walker, the founder and chairperson of Walker Digital, told me, “You have the ability to structure the legal department, and, in small part, the company, as you see fit as long as it acquires adequate patent protection for our inventions.” I was given a lot of flexibility, and consequently, I was able to do things a little differently than you might see done traditionally.

Usually in the development of patents, a company is focused on its core product to the exclusion of patent protection. In other words, the company devotes certain resources exclusively to the production of whatever it is the company makes. If you are a computer company, you make and sell computers, and you also have other problems that go along with that process: you have to advertise them, produce them, and resolve disputes with labor unions. So, patents take a back seat to the rest of the operating essentials of the company. While various employees are involved in the company’s core practices, some employees may, almost accidentally, come up with inventions. That is the good

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part; if you hire smart, creative people, inventions can come directly from those people in many companies.

If a lot of inventions crop up, how do you capture them and make use of them in a large corporation? Usually, you have a separate patent department comprised of one or more attorneys and some patent agents. They can skim through a series of disclosures that employees have produced and make recommendations concerning whether or not the company should pursue a patent. But, as you can see, the patent is a side benefit. While employees are operating normally, patent protection arises along the way. It is good, but it could be much better.

### 1. Traditional Approach Explained

I have a schematic that is broken down into three levels. The top level represents a very broad generalization of what a company might do. You might create the products, advertise them, and distribute them to the market. This level of the diagram is the existing business structure and its policies.

The middle level contains various ways of modifying existing policies. For example, an engineer might discover a better way to make the product. An engineer might find a method to distribute the product a little better. New relationships might be developed. with suppliers, or management might figure out that if it puts the business on the Internet, it can do better. The same process applies to advertising. Hopefully the marketing chief is always reevaluating the ways your products are marketed so you can adapt your advertising policies to changing conditions.

At the final level, there is patent opportunity assessment, which is separate from all other corporate practices in most companies. You have a group of people who look at what is being done and try to pull out patentable inventions from there. All too often, the goal of that patent opportunity assessment is a numerical one: companies have a strict number of patent applications to file. For example, management might mandate filing seventy patent applications a year, or, for a larger corporation, filing 1500 patent applications a year. The numerical goal drives the entire process.

### 2. Utilization

Once you have patented inventions, what do you do with them? Utilization is obviously up to the company, and it depends on the amount of resources that it is willing to spend on utilizing patents. That amount might be nothing; the company might just pull them out from a back room if it gets sued. But some companies are more aggressive.

For example, IBM has about one billion dollars in revenue from its patent portfolio every year, and its patent revenue is always increasing. IBM is the largest patentee in the United States, with roughly 50% more patents issuing each year than the next largest patentee. For companies that do not stress patent resources, utilization of the invention can be difficult because the invention was, in most circumstances, an afterthought that was pulled from the existing practices of the business.

### 3. Assessment

So, you have the patented invention. What happens then? You implement an assessment process with which you try to find and develop a product around the invention. Consider the inventor who came up with a new way of manufacturing the silicon wafer, or the inventors who came up with a new way of compressing data for transmission along the Internet. They might have had a very efficient idea, but that does not mean that it can be productized-turned into a product. Having a good invention is not enough: there may be an existing product in the market that is better.

You might have to try to find a market for the product. With an invention whose development you just winged, you might have to struggle to see if a market even exists. The market might be outside your core business practice. The market might be in your core business practice, but it might be very small, generating only a few thousand dollars of extra revenue per year. The potential benefits of marketing the invention might be far outweighed by the costs of assessing the opportunity. Ultimately, there may be no product or new market for that invention. Some statistics claim that less than one percent of patents is actually used. By used, I mean directly licensed, as opposed licensed in a bundle with a hundred other patents. Direct licensing or direct utilization of a patent in a product is rare when you look at all the patents that are issued in the United States.

#### 4. Under-utilization

This points to the under-utilization of resources that could have been applied to the patenting process. Traditional utilization follows a technology-push approach, meaning that technology drives the patent process. At the core are technology enablers, like the engineer who came up with a new silicon wafer. Once the engineer comes up with the enabling technology, he may pass it off to the patent department that then files a patent for it. Whether immediately or several years after the patent is issued, eventually someone will examine the patent to see if it represents something appropriate for creating a new product and whether there is a market for it. The marketers have to see if the proposed product would generate profit or if it would cannibalize sales of another product, in which case they might not want to pursue it. Because the technology push is somewhat inefficient, there is under-utilization of patents. You might have a significant number of patents that sit on the shelves and never get licensed or spun off into a product.

### B. The Optimal Approach

#### 1. Identify a Need in the Market

I will contrast the traditional approach with what I call the optimal development of patents. In the optimal development of patents, you do not let technology push the patent through development. Instead, you allow for a marketing-pull of the invention; that is, you let marketing lead the invention process. You start off with a need for an invention.

Before you even invent anything, you ask what problems exist, and what needs must be met by an invention. Once you have a need or a problem to solve, you can verify that the need creates a market. If you find a way to transmit data more efficiently over the Internet, the potential market is anyone who would be interested in buying Internet equipment, routers, and home computers. The

need must identify the market. Once the need and the market are identified, you develop the invention. Although you might not solve the problem after ten years, at least you know that your approach will let you create a marketable invention once you identify the need.

## 2. Development of the Product

Once you have the invention, you can develop the product around it. Since you have identified a need in the market, you know that the product will have a market. You know that the problem can be solved, the solution can be commercialized, the patent can be licensed, and the idea can be developed into its own product. Presumably this theory yields a higher return on investment for your patent dollar. If you invest strictly in inventions that are going to be market-viable, then you are going to end up with more inventions that you bring to the market.

## 3. Benefits of the Approach

There are some benefits to the optimal approach. Since you start by filtering out things that ultimately are not going to result in commercial utilization, you will not spend a lot of resources on identifying and patenting anything that will not generate money.

Another filter is to identify what you can own, and thus what is patentable. You might have the greatest invention in the world, but if it is easily copied, then you might not want to invest time in it. Perhaps first-mover advantage, especially important in the absence of exclusivity, is not going to be easy for you. Essentially, there is a two-stage filter: (1) filter out inventions that are insignificant from a value standpoint and (2) filter out inventions that are either unownable or unpatentable. Thus, you optimize resources to net a high return for your patent dollar.

If you take this approach, you are not necessarily restricted to patenting only things that your company does. You might be an engineer for Texas Instruments, but that does not mean that you have to work on silicon wafer technology. Under my approach, the engineer could say, "You know what, I have a great new idea for manufacturing doorstops." If you release the inventor from restrictions on what he is able to invent, you can identify even more inventions.

Marketers are at the center, and they will pull the invention through, rather than allowing technology to try to force the invention. Because you identify the marketing aspects early on, you end up with much more valuable patents in the end.

## III. THEORY IN PRACTICE: THE WALKER DIGITAL CORPORATION

### A. Licensing and Spin-offs

I like to think that Walker Digital Corporation follows these approaches pretty rigorously, and we are always evolving. As a small company, we are able to adapt rather easily. We only have about sixty employees, and it is much easier for us to change than for an organization with thousands of employees to change. We direct all of our research and development efforts to inventions that we can identify as both valuable and ownable through patent protection.

Why? Because you should not create things that are valuable and expect that first-mover advantage will provide the exclusivity you need to maximize revenue from your invention. All too often, you will be drawn into a huge battle over advertising and distribution channels. At least in the beginning when you have scarce resources, it is better to focus on things that you can protect with patents.

We have various ways to commercialize our inventions. At one end of the spectrum, is licensing. A license is basically a promise not to sue someone for practicing your invention. At the other end of the spectrum are spin-off companies.

You can develop your own companies and launch them based on whatever invention or set of inventions you have developed. We have done so a few times. One public company you might recognize is Priceline.com. We spun off that company about two and a half years ago. However, it is a much larger undertaking to launch an entire operating company than to sit down with a few technology people and licensing attorneys to draft a license agreement. Although you may receive a larger payoff for launching a company in certain circumstances, that process is much more resource-intensive than licensing.

#### B. The Hybrid Approach

Between the two ends of the spectrum is a hybrid approach, in which you can acquire an existing company and apply your inventions to that business. For example, imagine that you had an invention in the vending machine field. If you thought that vending machine companies would not license your invention, you might acquire the companies. You buy them out and introduce your own management at levels that are able to put the invention to use.

That way you do not have to launch your own vending machine company or acquire all the knowledge of its hardware and distribution channels. Someone else has already done it for you; you just acquire it. The hybrid approach is analogous to injecting your DNA into another organism—you take someone else's company and apply a new layer on top of it.

#### C. The Evolving Corporation: Implementation of Corporate Policy Managing Patent Law

As a patent lawyer, I was given a lot of flexibility to modify the practices of the company. I let patent law procedures guide how to shape the policies of the company. It is very easy for any patent attorney to reiterate the requirements of Title 35 of the United States Code or the requirements of Chapter 37 of the Code of Federal Regulations. It is much more difficult to reshape the entire corporation around the way that those laws and rules operate. Luckily, I was able to do it early on when the company was very small, so now it is easy to propagate as we acquire more employees. Patent laws and rules are always evolving, so the corporation has to evolve to take them into account.

Also, you evolve as you figure out better ways of doing things. In order to remain viable, your patent and corporate policies should be able to evolve. You must consider two factors in your evolving corporation. First, there is patent law. Second, there is high-level corporate policy.

Most foreign countries grant a patent to the first to file an application. By contrast, the United States focuses on the criterion of first to invent, so inventors must document precisely when they have created their invention. Otherwise, they might get into a priority battle, which might lead to litigation some time in the future. In order to avoid potential priority battles, corporate policy should support notarization, provisional patent applications, diligent reduction to practice, periodic development of the invention, research to detect prior art, adequate specification of patent claims, and inventor review.

### 1. Notarization

How do you implement a corporate policy of documenting all potential inventive activities? First, you have inventive documents notarized immediately. We have a staff of people that constantly generates documents. Inventions may or may end up patentable, but, no matter what, all documents are notarized. That way, whenever you have to show the conception of an invention, you have a paper trail back to the beginning-back to day one.

### 2. Provisional Patent Applications

You can also utilize provisional patent applications. A provisional patent application is essentially a way of holding a place in line at the patent office. It is not an actual patent application, because it never matures into a patent. Instead, it is a way of securing some limited rights early on from the patent office, so that when you eventually file a full patent application, you can refer to the provisional application as proof for dating purposes.

### 3. Diligent Reduction to Practice

Next, diligent reduction to practice of the invention is required by 35 U.S.C. § 102 (g). What is reducing an invention to practice? There are a couple ways to do this: you can actually build the invention, or you can file a patent application.

There might be a great deal of time between the time that you think of an invention, refine the concepts of the invention, and actually file that patent application. So, how do you document diligence? You document it much the same way that you document conception-notarize everything. Every team of people must generate documents to be notarized.

### 4. Periodic Development of the Invention

You also need periodic development of the invention. Essentially, you want to ensure that marketing is always in mind while you are developing the invention. The people who come up with inventions should be told to keep thinking of different embodiments of the invention, different uses of the invention, and different ways to make the invention better. Documenting those steps shows diligent reduction to practice. You did not simply think of the invention, write it down, and put it in your drawer until five months later.

### 5. Prior Art

Prior art can bar your patent. If, for example, there is a publication that discloses an identical invention that you have come up with or discloses an invention that is pretty close, or if your invention is obvious in light of what has already been created, then you can not get a patent for your invention. You do not want to expend resources to develop and patent an invention only to find out that you cannot own the invention because there is prior art that bars you. We have an entire research department at Walker Digital that surfs the Internet, skims Lexis-Nexis, and looks through files in the patent office to identify anything that is similar to inventions we are developing. That department is forwarded inventions via e-mail from the time they are first conceived.

We also have various levels of research. If you have just a glimmering of an idea—for example, “wouldn’t it be great if there was an eraser attached to a pencil”—you might send an e-mail to the research department to ask whether they know of any pencils that have erasers attached to them. They will do a preliminary search, a very quick-and-dirty search that takes about five hours. If they find something, then you do not proceed with the idea. If they do not find anything, then it is time to refine the invention. Now you think of all the different shapes for the eraser. Think of all the materials from which the eraser could be made, and think of all the ways that you could fasten the eraser to the pencil. Perhaps you arrive at a point where you say, “You know what? This really is the invention.” Then the research department makes a second attempt to find any prior art through a more exhaustive search—for fifteen to twenty hours. This kind of progressive research effort ensures that no prior art will render your invention unpatentable before you even start.

## 6. Scope of the Claims

The claims of the patent depend on what your specification enables, and they determine what you own—what you can exclude others from making, using, or selling. The claims are words; they recite what your invention includes and does not include. If your claims cover some, but not all, aspects of your invention, then you do not own the unclaimed aspects. Thus, the value of the patent depends on the scope of the claims. You have to make sure that your claims cover all the aspects of your invention that you think are valuable. You always have to keep the intended market in mind. The market is the central focus; it is where you start. The claims have to be consistent with how the invention is going to be commercialized, how the invention will look when it hits the market, and how your competitors might try to design around your invention.

This is primarily the task of inventors rather than patent attorneys, because the inventor is often the person in the best position to understand both what the invention is and what its uses are. Therefore, education of inventors in patent law and in reviewing patent applications is very important at Walker Digital. An inventor often spends a year and a half receiving preliminary training in patent law and patent procedure. Just like an attorney should, inventors are always learning how to carefully review legal documents.

## 7. Inventor Review

You must continually update your intended business model for an invention. Do you think that the invention is going to be deployed in a certain environment? Do you think that the invention is going



to be excluded from other environments? Those thoughts change over time. The patent application might be in the patent office two, three, or four years. During the time between filing and issuance, your business model might change several times. What happens if it changes? Hopefully, you can adapt the claims to meet those changes. Your specification has to support any claim changes that you make. You cannot just come up with any claim that you want. It has to be supported by your original disclosure. What happens if the specification does not support your changes? You file a continuation-in-part, which in layman's terms, is an improvement application that allows you to cover the new embodiment of the invention.

#### IV. CONCLUSION

Notarization, provisional patent applications, diligent reduction to practice, periodic development of the invention, research to detect prior art, adequate specification of patent claims, and inventor review are basic policies and procedures that you might want to consider if you are allowed to design a corporate patent system from the ground up. You ought to try to maximize both the value of the invention and the patent protection of the invention.